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ABSTRACT

This booklet discusses and provides suggestions for meeting the educational needs of gifted girls. The first chapter, "The Needs of Gifted Girls," describes the problem of underachievement among gifted girls and strategies that educators can use to support individuality, reduce perfectionism, encourage freedom, recognize socioeconomic and ethnic factors, and foster self-awareness of giftedness. The second chapter, "Identifying Gifted Girls," provides general guidelines for detecting talent in gifted girls, where to look in order to find the behaviors that indicate giftedness, and indicators of talent in culturally different girls. The third chapter, "Rethinking Curriculum and Instruction," addresses how teachers can create a classroom environment to help gifted girls develop their potential, such as making feedback responsive to the needs of gifted girls, minimizing competition, practicing clustering, using compacting or learning contracts, integrating thinking styles, using role-playing, providing leadership opportunities, and integrating women into the curriculum. The final chapter, "Developing Resources and Support," describes how teachers can take advantage of resources already available in their schools to help meet the needs of gifted girls, including creating teacher coalitions, involving parents and students, involving the community, and planning a schoolwide program. A list of resource publications and publishers is included. (CR)

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Joan Franklin Smutny

Founder and director of the Center for the Gifted at National-Louis University, Joan Franklin Smutny teaches creative writing to the children in her program and gifted education to graduate students. Smutny also was the founder and director of the Center for Women at the National College of Education (now National-Louis University), where she focused on teaching, counseling, and developing seminars for women.

Smutny is co-chair for Membership and the Special Schools and Programs Division for the National Association for Gifted Children. In 1996 she received that organization's Distinguished Service Award for outstanding contributions to the field of gifted education.

Smutny has published extensively on the topic of educating gifted children. She is the editor of the *Illinois Association for Gifted Children Journal*, assistant editor of *Understanding Our Gifted*, contributing editor for the *Roeper Review*, and series editor for Ablex Publishing's Creativity Division. She also is the co-author of *Education of the Gifted: Programs and Perspectives*, published by the Phi Delta Kappa Educational Foundation in 1990.

Gifted Girls

by
Joan Franklin Smutny

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The Needs of Gifted Girls

All teachers have seen the gifted girl. She looks like any other child. She may be one of the talkative ones who never pay attention — the one the teacher has to separate from friends in order to get her to do her schoolwork. Or she may be the quiet one who does all of her assignments on time but never speaks up in class. Or she may be the quirky one who never follows directions and almost always hands her work in late.

Although teachers have seen these gifted girls, they do not always recognize them as gifted. Such girls often camouflage themselves well. In fact, gifted girls excel in making their talents appear ordinary or even nonexistent. More often than not, they do so without knowing they are doing it. And they do it because they have learned not to pose a threat to anyone, not to be too aggressive about what they know or want to know, and because they do not want their talents to endanger relationships they value.

Gifted girls from all ethnic, geographic, and socioeconomic backgrounds are languishing in schools

across the nation. The threat to their future is real. But many educators do not understand their needs. The Department of Education does not recognize the special needs of girls as critical to the process of setting a national agenda (AAUW 1992, p. 9). So the first step in any discussion about the needs of gifted girls is to recognize that they do, in fact, have needs, and that those needs are critical.

The Problem of Underachievement

In *Smart Girls Two: A New Psychology of Girls, Women, and Giftedness*, Barbara A. Kerr observes: "A society that wastes female brilliance has made it the norm for gifted women to lead an average life, and gifted women have largely adapted to that norm" (1994, p. 171). The messages that denigrate female achievement begin early and accumulate over time. By age 11, many gifted girls do not know they have talents. Others, who know, keep their talents secret. This means that many gifted girls waste their abilities by adjusting to what others expect from them, rather than develop their potential (Eby and Smutny 1990, p. 130). Thus coming to realize one's talents can give rise to a period of conflict: stirrings of a need to develop toward excellence at war with a need to conform, particularly during adolescence.

Sexism and discrimination (whether institutionalized or personal) eat away at the confidence and well-being of girls and young women. Giftedness does not exempt them from the deleterious effects of gender bias. In fact, quite the opposite is true. Their exceptional abilities of-

ten make them more vulnerable, more sensitive, and hence more responsive to social expectations and limitations than the average population (Silverman 1989, p. 8). Gifted girls face a quandary: They have abilities that urge them forward, that prompt them to explore all that education has to offer; and yet education does not run to meet *them*. When boys ask questions, call out their answers (sometimes without raising their hands), or engage in debate, adults tend to see the signs of an eager mind at work. Girls, on the other hand, receive reprimands or disapproval for the same behaviors that, in them, often are deemed to be too aggressive, pushy, unfeminine, or impolite (Reis 1990, p. 36).

Research on girls' school experiences clearly demonstrates that the education system is teaching students more than academic subjects. Like other channels for information in our society (popular media, peers, family, and so on), schools prepare children for gender roles. For gifted girls, such preparation means schooling them for underachievement.

Such gender stereotyping is one reason that girls shy away from math and science, why girls hesitate to raise their hands, why — particularly in adolescence — their self-esteem plummets far more than does that of boys and never quite returns. Even though gender gaps have narrowed somewhat in verbal and mathematical performance, girls still lag significantly behind boys in the sciences and suffer from low self-esteem, even in the face of their own competence. As reported by the American Association of University Women (AAUW) document, *How Schools Shortchange Girls*, a growing lack of confi-

dence invariably precedes gifted girls' diminished participation and performance in math and science:

> One result of this diminished confidence is a lowering of the role that competence plays in girls' decisions about continuing in math and science. Researchers have found that competence is a more important prerequisite for the attainment of male career ambitions than it is for females. That is, females and males abandon math and science for different reasons. Males who drop out of math and science tend to do so because of a lack of competence — they cannot do the work; many females who drop out do so even though they can do the work. (1992, p. 28)

For gifted girls, the discrepancy between ability and self-image may assume different forms, depending on their individual characteristics and background. Gifted girls may be those who:

- Achieve well but remain blind to their accomplishments;
- Perform poorly despite high ability and attribute their poor performance to low intelligence; or
- Are uninterested in school or achievement and excel socially, sometimes assuming popular leadership in negative ways.

These behaviors are cries for help from gifted girls — cries that will become increasingly faint as they learn to adapt themselves to the culture of silence that pervades the lives of so many talented women.

Educators must answer these cries, and the first step to this process is an understanding of the needs of gifted

girls. Certainly gender biases and stereotypes in school create unique problems for all girls — problems that handicap and thwart their first attempts to step into the world (Sadker and Sadker 1994). So, the question arises: What do *gifted* girls need that all girls do not? The answer is that while all girls need an ongoing support system for their development and freedom, gifted girls require support that is particularly sensitive to the dilemma that talent brings to the position of females in our society. In many ways, their special abilities aggravate the effects of discrimination and may lead to damaging behavior.

Based both on research and long personal experience, the following outline identifies the special needs of gifted girls. I have included examples of gifted girls I have met as women, as well as those I have worked with in the classroom, to illustrate these needs.

Support that Undergirds Individuality

Gifted girls assume all sorts of extra burdens that educators need to understand. Few gifted girls know they are talented. They know only that they are different and that this difference is somehow wrong or weird.

Consider the story of Elizabeth. Her mother was a visual artist who stimulated her daughter's imagination with books and art projects. Elizabeth entered school brimming with stories and imaginative worlds she had invented. Most of the classes bored her, except for drama. There, she had free reign to imagine and explore. Every day she looked forward to that one class that inspired her and made her feel free. But her moth-

er grew concerned. Elizabeth, who had always talked to herself and run around imagining things, started staying up very late (sometimes until 2 or 3 a.m.) to carry on with her creative play. Eventually, her mother met with school officials, and they removed Elizabeth from the drama class.

Elizabeth was crushed. The only spark of her day was gone, and she never knew why. All she knew was that this thing she had — this imaginative force that drove her to explore and discover more and more worlds — was wrong, an unacceptable thing that would get her in trouble. Because of this, she never questioned the decision, never even mentioned her disappointment to her mother. This was the beginning of a long and unsatisfactory school experience for Elizabeth — an experience in which she buried all that made her unique in order to devote herself to anticipating others' demands and expectations.

In addition to their acute sensitivity, gifted girls play destructive mental games with themselves. These are learned games played unconsciously in response to the conflicting expectations they experience. Two examples frequently explored in the research are:

- "The Horner Effect," or "Fear of Success," meaning that girls purposely hold back because of a need to please others, rather than to compete with them. This need is more intense in gifted girls than in average girls (Kerr 1994, pp. 160-62); and
- "The Impostor Phenomenon," meaning that girls feel pressured to explain away their success be-

> cause it is contrary to social expectations and their own self-image. Thus gifted girls are likely to maintain that they perform well out of luck or because people did not evaluate them properly (Kerr 1994, p. 165).

Educators and parents need to develop strategies for helping gifted girls negotiate this emotional mine field. Because gifted girls either do not see their own abilities or choose to repress them, they need support that is specific, rather than general. Such support should value particular qualities, rather than quantitative measurements. ("You got an A; good job!" is an example of the latter.)

Elizabeth began to revise her self-image only after she reached college and several professors took a special interest in her work. Their responses to her work were specific and detailed, and they suggested ways in which she could develop her ideas further. Gradually, Elizabeth stopped censoring herself.

More than a support for their work, gifted girls crave validation as *individuals*. Because of their special talents, many gifted girls walk through life asking themselves what is wrong with them. Particularly in adolescence, they either fail to identify with the interests of other girls and live in isolation or sacrifice their abilities for social acceptance by peers whose opinion they value over their own (Kerr 1994, p. 167). They need to be encouraged to be themselves, in part by being given specific feedback that permits them to feel that there is something very right with their unique abilities.

Support that Reduces Perfectionism

Many gifted children struggle with perfectionism. Gifted girls compound the problem of perfectionism with self-esteem problems. Thus gifted girls not only sabotage their own achievements through such dysfunctional behaviors as the "fear of success" and "impostor phenomenon," but they then punish themselves for not attaining their goals.

Perfectionism can be particularly difficult for girls who have convinced themselves that they are frauds. As Kerr (1994, p. 165) points out, they work doubly hard to hide the fact that they are not what they seem; their hard work results in greater achievement, which then increases the pressure they feel to work even harder. Perfectionists often have unreasonably high expectations and very little tolerance for error. Gifted girls need support that specifically helps them develop a tolerance of mistakes and encourages freedom in the learning process.

Adults who are not aware of the problem of perfectionism in gifted girls may miss the telltale signs and thus contribute to destructive tendencies. One common mistake is to assume that the child knows more than she actually does. Knowing that the child is bright and expert in the work she displays, adults present the child with much praise and high expectations. That can make it difficult for the child to admit that she needs help. In addition, adults' perceptions occasionally lead even teachers to dismiss the child's requests for help as unnecessary.

Consider Ellen. She had a considerable musical talent that showed itself at a very young age. She had perfect pitch and played the piano expertly. But she could not read music. No one bothered to teach her to read music, because the adults around her believed that she already knew how. When she protested that she could not, the adults would say, "Oh, don't lie; you can read music." The expectation that she *should* be able to do something that no one had taught her set up a faulty, but not uncommon, logic in her mind. She began to feel that she should just know things, and the fact that she did not made her conclude that there was something wrong with her. Not being able to read music created the seeds of low self-esteem, which her musical talent only intensified. People continued to expect her to perform at an extremely high level, while she herself struggled against this missing piece of musical education. Ellen evolved her own kind of perfectionism, where she expected extraordinary performance from herself without taking the steps to learn — indeed, without even knowing that the steps are there.

What Ellen needed were adults who would honor her requests for information and make her feel that the process of learning to read music was a natural step in her development as a musician, rather than a sign that something was wrong. She also needed to feel that her views as a person and a musician deserved respect. As a result of her experience, Ellen began to doubt the value of her own voice, a common experience among girls, particularly gifted girls (Gilligan 1982).

When dealing with gifted children, especially girls who are vulnerable to self-doubt, adults need to trust

and honor requests for information. For a child like Ellen, an alert adult could quickly interrupt a potentially destructive pattern, enabling Ellen to relieve her fear of having to perform beyond her understanding.

Researchers have discovered that many girls — especially in the middle and high school years — harbor ambivalent feelings that prevent them from making demands or trusting in their own instincts. According to the AAUW report, "Their responses reveal a sometimes debilitating tension between caring for themselves and caring for others, between their understanding of the world and their awareness that it is not appropriate to speak or act on this understanding" (AAUW 1992, p. 12). They would rather silence themselves than take the risk of enduring ridicule or offending anyone. Teacher-student interactions in classrooms inadvertently foster this self-censorship.

Research also suggests that the content or quality of teacher responses to girls' work differs significantly from that offered for boys' work. Based on a three-year study of more than 100 fourth-, sixth-, and eighth-grade classrooms, David and Myra Sadker identified four kinds of teacher response: praise, acceptance, remediation, and criticism. As cited in the AAUW report:

> They found that while males received more of all four types of teacher comments, the difference favoring boys was greatest in the more useful teacher reactions of praise, criticism, and remediation. When teachers took the time and made the effort to specifically evaluate a student's performance, the student receiving the comment was more likely to be male. (1992, p. 69)

Gifted girls can progress beyond self-defeating assessments of themselves when supportive adults listen to their concerns, questions, and comments, and then offer reassuring responses that provide direction for their work. There is an art to this process. For example, if a frustrated gifted girl begins sabotaging a project she has started, a teacher or parent could respond by saying: "I can see why you feel you've reached a dead end with this idea, but I also can see that you attempted a new approach. Here is where you ran into trouble. . . . Perhaps if you tried your idea this way, you could keep going." Or a teacher could question the child: "Why did you use this approach? What was your thinking?" Helping gifted girls to focus on their own thought processes will help them continue learning.

Support that Encourages Freedom

Girls with special talents need classrooms where the freedom to explore one's interests and strengths is strong and where teachers encourage flexibility in how students tackle projects and ideas. In any given class, there could be girls gifted in math and science, in the arts, or in the humanities. Girls often hide their abilities, so they need classroom experiences that are open-ended and that help them discover what they enjoy doing and where their strengths and talents lie. According to Piirto (1991), the participation of highly creative women in careers in the visual arts, music, math, and science is meager. Girls with creative talent require more freedom to practice their abilities through

alternative projects and assignments that allow them to use and develop their innovative thought processes.

Gifted girls crave freedom. They also need the aid of a discerning adult (a teacher, a parent, a counselor, a coach). Talents they never knew they had may suddenly manifest themselves in the context of an approving classroom environment that embraces independent thinking and creative reasoning. Gifted girls thrive in contexts where they do not feel they will lose acceptance or respect for attempting something new.

Support that Recognizes Socioeconomic and Ethnic Factors

Socioeconomic status (SES) exerts a powerful influence on the educational development of girls. However, social class, ethnicity, and gender combine in complex and unpredictable ways that make it difficult to detect the needs of gifted girls. Among low-SES eighth-graders, girls tend to test higher than boys do in reading and math, while among high-SES eighth-graders, girls test higher in reading but lower in math (AAUW 1992, p. 34). This changes in high school, where low- and high-SES boys make significant gains over girls. In particular, high-SES African-American boys far outdistance high-SES African-American girls in both reading and math scores (AAUW 1992, p. 35).

Among low-SES students, Asian girls, contrary to popular opinion, do not perform significantly better than do white and African-American girls on the same socioeconomic level.

Latina girls suffer the most dramatic descent in self-esteem of all ethnic groups. With so little support for a strong self-image at home or in school, Latinas quickly lose faith in their potential to achieve. Rarely called on in class and least likely to be identified as gifted, urban Latina girls had the highest dropout rate of any group in the United States in 1990 (Orenstein 1994, pp. 199-200).

In contrast, African-American girls experience what might be called a dual self-image. According to recent research, African-American girls do not suffer the same loss in self-esteem between age 11 and 17 that girls in other groups do (Kerr 1994, p. 179). Despite the fact that they have fewer interactions with teachers than do white girls, African-American girls tend to initiate interactions much more frequently and to perform better than boys do (AAUW 1992, p. 70). Certainly these girls suffer from sexism both within their own communities and in the white world. Yet they also retain a powerful hold on their own self-respect and personal confidence.

In her analysis of autobiographical writings by African-American women from slavery to the present, educator Mary Williams Burgher found that the model of European femininity — grounded in delicacy, innocence, and an idealized helplessness — has been largely unavailable to black women. Instead, they have measured their worth through strength of character and a tenacious sense of self (Burgher 1979). African-American girls often experience strength and assurance within their own home communities. Author bell hooks mentions this in her book, *Yearning: Race, Gender, and Cultural Politics*:

> In our young minds houses belonged to women, were their special domain, not as property, but as places where all that truly mattered in life took place — the warmth and comfort of shelter, the feeding of our bodies, the nurturing of our souls. There we learned dignity, integrity of being; there we learned to have faith. The folks who made this life possible, who were our primary guides and teachers, were black women. (1990, pp. 41-42)

Unfortunately, the nurturing strength that undergirds the growth of African-American girls at home often vanishes as soon as they cross the threshold of a predominantly white school. African-American girls respond to the void by retreating from the academic world. Thus higher-income girls who attend desegregated schools may receive some benefits from their education, but they also feel excluded and socially isolated (AAUW 1992, p. 35).

In large part, schools reinforce this problem by the way they regard African-American female performance. When they equal the achievement level of white boys, black girls are assumed to have attained this level through hard work, while it is assumed that the white boys simply did not meet their potential. In addition, teachers often reinforce African Americans in particular social behaviors while they reinforce the whites in academic achievement (AAUW 1992, p. 71). This is where the "dual self-esteem" asserts itself, making gifted African-American girls feel valued and talented in their private world but banished from academic excellence as an exclusive "white" world that is out of their reach (Orenstein 1994, p. 160).

African-Americans who suffer poverty as well as race discrimination may find the barriers to success overwhelming. Peer pressure to underachieve is strong, especially in inner-city schools, where many of the teachers and administrators are white and where students feel education is a "white" thing. Gifted African-American girls need support that is sensitive to such pressures. Citing J.E. Helms, Kerr observes that "gifted African Americans are forced into 'racelessness,' with peers not accepting their achievement and whites not accepting their blackness" (1994, p. 179).

So, what do gifted girls from minority groups need? Girls from more impoverished backgrounds are at greatest risk, because the pressure to retreat from academic achievement in school is strong and because the girls frequently lack the self-confidence to persevere. Teachers, counselors, and mentors are needed to help advise gifted girls of scholarship and program opportunities, as well as to convince them that they are not abandoning their identity or their community by achieving academic goals.

Support that Fosters Self-Awareness of Giftedness

Many talented girls need to learn to recognize their own gifts and the emotional challenges that accompany them (Garrison 1989, p. 11). Many adults shy away from teaching this to girls because they think they will become too self-important or arrogant. However, the chances of this happening are practically non-existent.

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As a group, girls receive far less reinforcement than boys do. They go through life imagining that something is wrong with them, or they conclude that they have nothing special to give.

It is unfortunate that the research on the common emotional struggles of gifted girls never reaches the girls themselves. New programs and systems may address their problems, but few people actually create an awareness in the girls that their troubles are part of a larger pattern among the gifted female population.

Consider Madeleine. She had always excelled in school but never felt as though she was bright. When asked about this, she would say, "I just don't feel like a smart girl. If I have a gift at all, it's that I'm good at figuring out what people want." Instead of applying to universities that really attracted her, she applied to ones that she thought would accept her. But she was fortunate. In college she began to thrive. College professors invited her to participate in special programs and took time to critique her work in depth. Then, in a college psychology course she learned how gender bias affects the self-concept of women. She discovered that the timidity and self-doubt plaguing her were not an *individual* problem, that countless women suffer from the same phenomenon. She explained, "I felt so liberated! For the first time, I realized nothing's wrong with me, that many other women have the same problem I do. It gave me an awareness I hadn't had before, and a courage to go on."

Gifted girls need to know why they are struggling. They can process this information in productive ways,

provided that adults give it to them in a balanced and responsible manner. When teachers, counselors, or parents tell girls that their feelings and attitudes are common to other girls who have special abilities, gifted girls can begin to stop attributing their poor self-image to their own inadequacy.

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Identifying Gifted Girls

Identifying gifted girls is a matter of making the invisible visible. Gifted girls camouflage themselves. Unfortunately, teachers already are burdened with so many responsibilities that they can hardly find time or resources to seek elusive gifted populations. These teachers need methods to identify gifted girls that do not increase the burdens on themselves.

What to Look For

Teachers cannot rely on standardized tests to identify gifted girls. Certainly the low self-esteem and perfectionism of gifted girls increase the pressure and fear of failure that most children bring to the testing situation, so that they tend to score lower on such tests. In addition, the tests themselves may be unpredictable so that they cannot always reveal the abilities of gifted girls. As the AAUW report indicates:

> Perfectly good achievement tests can be designed in math, language arts, and other subjects on which girls will tend to score higher than boys. Other equally good

tests can be developed on which boys will tend to score higher, and still other tests can be developed on which there will be no sex differences. (1992, p. 52)

Rather than rely only on test scores, teachers should focus on behaviors that indicate giftedness. Following are some general guidelines for detecting talent in gifted girls.

1. Become familiar with a range of gifted behaviors common in the general population of gifted students. Examples include:

Academic Behaviors

- Reads voraciously and retains what she reads;
- Communicates ideas well both verbally and in writing;
- Possesses superior analytical and conceptual abilities; and
- Explores and synthesizes issues from multiple points of view.

Creative Behaviors

- Expresses unusual, out-of-the-way points of view;
- Demonstrates special ability in the visual arts;
- Shows promise in performing arts (music, drama, dance); and
- Manifests improvisational ability in a variety of contexts.

2. Become aware of the special challenges that gifted girls face, including:

- Low self-esteem;
- Apathy, based on resignation or feelings of inferiority;

- Fear of taking risks;
- Exaggerated concern about acceptance among peers;
- Ambivalent feelings about talent; and
- Conflict between cultural identity and school achievement.

3. Examine the signs of potential giftedness. While individuals express talent in different ways, common indicators include:

- Discrepancies between performance and self-concept;
- Discrepancies between average or low test scores and exceptional originality, imagination, and insight in independent projects or assignments;
- Disinclination to participate, despite signs of talent or ability;
- Sudden, unaccountable appearance of some ability in a seemingly average girl;
- Misbehavior in class that shows ingenuity (despite its disruptiveness) or that reveals leadership ability; and
- Notable contrast between school performance and the abilities, achievements, and activities reported by parents or community members.

Where to Look

In order to find the behaviors that indicate giftedness, teachers need to broaden the range of activities in which talent can occur. Tests and homework assignments do not reveal talent in many gifted girls. They may appear

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to be no more than average students until some unusual assignment or unique challenge inspires them. Teacher and parent observations, as well as a greater variety of student projects, will produce a clearer, more detailed view of girls' abilities (Eby and Smutny 1990, p. 131).

For example, consider the experience of Gabrielle. According to her mother, Gabrielle was a born conservationist. She loved nature and several times participated in a summer ecology program, where she tested water in several local ponds. In this program, she also studied native plant and animal life and examined the threat of suburban sprawl on the last remnants of the prairie. Gabrielle's mother assumed that her daughter would enjoy science in school as a natural extension of her extracurricular interests. But she did not. In fact, Gabrielle's performance in science was ordinary. Nor did she show signs of promise in any other subject. When asked what her favorite class was, Gabrielle just shrugged and said, "Recess, because then I can go outside."

The fact was that Gabrielle did not feel comfortable sharing her knowledge on ecology. She was afraid that the teacher would ask her things she did not know and that the class would laugh at her for pretending she knew so much. So Gabrielle stayed quiet and tried to be as invisible as possible. Gabrielle did what many talented girls do — she reserved her gifts for activities *outside* of school.

Or consider Lakesha's story. Lakesha, an African-American junior high student, sat silently in the corner of the classroom. She was shy and performed as well as

any average student. She was very pretty, and the boys enjoyed staring at her and making little remarks just loud enough for her to hear. This made Lakesha uncomfortable, because it made the other girls hostile toward her. She felt ostracized. In response, she retreated into herself.

One day, the teacher showed a film about several American artists, including Georgia O'Keeffe. Lakesha was enthralled. As she looked at the O'Keeffe paintings on the screen, she felt that she could dive into the fantastic colors and shapes and never come back. After the film, the teacher asked the students to write about what they saw. The responses could be stories, poems, or anything else they wished as long as it was written. Lakesha wrote a poem, and in that poem the teacher — and the whole class — discovered that Lakesha had a gift for poetry. This was the beginning of a new experience for Lakesha. The attention given her work had a positive effect on the other African-American students, inspiring them to take their own achievement more seriously.

Teachers need to use strategies that allow talent to occur. In fact, the creative teaching strategies that illuminate the hidden talents of gifted girls also enhance the learning of all students. Following are some suggestions that may be useful:

1. Teachers should let students know that their overall performance is valued, not just their performance on tests. If girls know that teachers value them as whole people and not just as good test-takers, then girls will gain greater self-confidence.

2. Teachers should provide a variety of activities within a given assignment. For example, the teacher might allow students to integrate a history lesson with interests of their own: a mathematical calculation, an artistic representation, a study of environmental conditions, and so on. Girls who perform at an average level in a task that either bores or intimidates them may come alive when a wider range of options is available.

3. Teachers should de-emphasize competition and provide opportunities for small-group activities, so that students can explore problems or ideas without feeling that the focus is on them as individuals. Girls adopt an ethic of caring that conflicts with the competitive structures of the classroom (Gilligan 1982).

Consider Magdalena, who had mathematical talent. Her mother remembered how quickly she computed the prices in the grocery store and how she enjoyed calculating what they would save if they bought generic brands. Magdalena was a Latina who went to a school where the other two Latina girls in the class did not share her interest or drive. But they were her friends, and she felt close to them. Magdalena did not want to be placed in a group with only Anglo girls, so she became an average student.

One day, her teacher gave the class a math problem and said they could work with friends. Magdalena worked with her two best friends, both of whom had problems with math. She enjoyed helping them understand the math concepts; and together they discovered a whole new approach to the problem, an approach that no one else had considered. Magdalena thought of it in

the process of answering her friends' questions. Because her friends benefited from Magdalena's talents and felt affirmed by their joint success, Magdalena felt more encouraged to express her gift.

4. Teachers should use portfolios as part of each student's evaluation. Portfolios provide teachers with alternative views of all their students, especially girls.

5. Teachers should organize a talent day, when students can share their work within some general theme. Some girls may find this intimidating but will be more comfortable if they have the option to work in pairs or small groups. This is another opportunity for talent to emerge.

6. Teachers should encourage support from parents and community members by giving them opportunities to participate in school. Community members and parents can provide insights about what girls enjoy doing, the abilities they manifest at home, and the challenges they face that may interfere with their school achievement.

Torrance's List of Indicators

E. Paul Torrance, a pioneer in identifying talent in culturally different and lower-income children, maintained that giftedness often appears in behavior that is easier to observe than to measure. He created a list to encourage teachers to think along new lines. The list was never meant to be comprehensive, but it gave useful examples of how to locate talent in populations that did not have the benefits of a white, male, middle-class

environment. Following are useful indicators of talent in culturally different girls (Torrance 1977, p. 26):

- Ability to improvise with commonplace materials and objects.
- Articulateness in role playing, sociodrama, and story telling.
- Enjoyment of and ability in visual arts, such as drawing, painting, and sculpture.
- Enjoyment of and ability in creative movement, dance, dramatics, and so forth.
- Use of expressive speech.
- Enjoyment of and skills in group activities, problem solving, and so forth.
- Responsiveness to the concrete.
- Responsiveness to the kinesthetic.
- Expressiveness of gestures, body language, and so forth, and ability to interpret body language.
- Humor.
- Richness of imagery in informal language.
- Originality of ideas in solving problems.
- Problem-centeredness or persistence in problem solving.
- Emotional responsiveness.

It is important to understand that identifying gifted girls demands more than simply expanding the methods of identification. Concerned teachers may need to consider at least some minor changes in the teaching strategies and classroom activities they use. Girls can not express talents for teachers to identify if the conditions for their expression do not exist. Even a few ac-

tivities, integrated now and then into the regular curriculum, can encourage them to take a few risks. For gifted girls, a sensitive, caring teacher may be all that stands between quiet resignation and the fulfillment of their potential.

32

Rethinking Curriculum and Instruction

Gender bias is so pervasive that many teachers, parents, and administrators unwittingly lapse into it. However, from about ages three to seven, most girls have not yet succumbed to the aggressive socialization that encourages them to hide their abilities (Silverman 1991). In the early years, girls often feel as free and unhampered as boys (Research for Action 1996, p. 13). Therefore, teachers can be assured that it is never too early to be sensitive to gender bias. In fact, preschool and kindergarten classrooms are ideal environments to explore teaching strategies that will support the budding talents of young girls before they begin doubting themselves.

To begin creating a classroom environment more conducive to gifted girls, teachers may need to consider their own daily interactions. Here are some questions to think about:

What are my expectations with respect to girls? Do they differ from what I expect from boys? For example, do I expect them to perform well in math and science?

How do I interact with the girls in my class? Do I question girls as much as boys and at the same conceptual level? How do I respond to girls' answers or questions? Do I encourage them to elaborate on their answers? Do I respond to their questions in the same depth or detail as I do the boys' questions?

Do I encourage girls to assume leadership in group projects? To set up experiments? To initiate problem-solving in new or unusual ways?

Do I actively discourage sex-role stereotyping for boys and girls? Do I monitor gender bias in my students and discuss it with them when the need arises?

This line of questioning will help teachers become more aware of the classroom environment they are creating.

Teaching Strategies

By the time they reach the upper grades, most gifted girls already have been socialized into self-destructive behaviors. However, if teachers recognize the talents of very young gifted girls, they can help those students to develop their potential. Perhaps most important, teachers need to offer girls many opportunities to explore their talents. Following are several useful strategies:

Make feedback responsive to the needs of gifted girls. Gifted girls are hungry for challenges, but they also are hungry for respect for their ideas and their intelligence, even when they are unsure of answers or feel confused.

Minimize competition. In competitive instructional settings, young girls often retreat into a quiet acceptance

of mediocrity. Such strategies as learning groups, hands-on activities, independent projects, role-playing, and so on, enhance the learning of gifted girls in school (Smutny and Blocksom 1990, p. 43). A less competitive environment also will minimize the conflict gifted girls feel between their talent and their need to belong.

Practice clustering whenever possible. Girls enjoy working in groups, particularly all-female groups (Research for Action 1996, p. 82). For gifted girls, the best strategy is to form a group where gifted girls can work together.

Use compacting or learning contracts to enable gifted girls to capitalize on their strengths. Compacting enables gifted girls to advance in areas where they are strong without drawing undue attention to themselves (Winebrenner 1992). This feature makes the practice ideal for girls who feel self-conscious about their gifts and do not want to be pulled out for a separate program. Learning contracts encourage individual girls to set their own pace and create their own activities and projects (Winebrenner 1992).

Integrate thinking styles — critical with creative, academic with imaginative. For gifted girls, it is important to integrate the levels and types of thinking within single subjects. For example, math classes that include imaginative and creative approaches.

Use role-playing. Role-playing allows gifted girls to experiment without feeling threatened and to acquire insights they would not otherwise have. Role-playing creates a flexibility in being and doing that is safe for gifted girls.

Provide leadership opportunities. Leadership opportunities are vital to girls' maturing sense that their ideas and insights have a place and a value in the surrounding community. Once teachers become familiar with their female students' particular strengths or gifts, they can encourage them to assume new positions of authority and leadership, such as coordinating group work or leading a skill demonstration. Gifted girls need opportunities to experiment with roles that are unfamiliar but that will help them break out of their self-doubt and timidity.

Women in the Curriculum

When considering a curriculum that will support gifted girls, teachers should begin with themselves. As role models, they teach a great deal about gender through their daily interactions with students, by the inclusion or exclusion of content on women in their classes, and by the kinds of activities they create. Examining their own teaching will help teachers become more aware of their own blind spots and more vigilant about inadvertently sending the wrong messages to children.

The exclusion of women from the curriculum is a major cause of girls' diminishing self-esteem (Eby and Smutny 1990; Kerr 1994; Martel 1990). Most intervention programs attempt to alter the dominant focus on male achievement (male historical figures, male inventors, male politicians, male scientists, and so on) to include the significant contributions of women (McCormick and Wolf 1993, p. 86). When girls study about women in a wide range of fields, especially those not tradition-

ally considered female, it helps them to see new possibilities for themselves and their future. (At the end of this fastback, teachers will find a number of educational sources for ordering curriculum materials on women.)

One way to explore gender in the classroom is to include it in a study of culture. The study of how different societies construct appropriate roles and different standards for women and men can be instructive. For example, children might explore how young girls and boys are raised to fulfill certain roles, whether the culture is matriarchal or patriarchal, what options for self-expression exist for males and females (Can men be dancers? Can women enter politics?), and how gender roles differ from what students are likely to find in the United States and other Western cultures.

Another way to integrate material on women is through the reading of women's biographies. In a history class, for example, gifted girls might learn more about the challenges and accomplishments of the suffragists of the 1920s or such world leaders as Israel's Golda Meir or Britain's Margaret Thatcher. For girls accustomed to seeing history as a record of male achievement, learning about women will be a welcome change. It is important to remember that female achievement throughout history remains a more or less invisible phenomenon. Thus any visibility will help redress the imbalance.

Whenever the opportunity arises, teachers should take advantage of any specialists they know (men or women) in nontraditionally male or female fields. Inviting suc-

cessful women in nontraditional roles (pilots, scientists, politicians) or in other positions (writers, artists) can be inspiring for girls. If the visiting specialist can offer a workshop for the students and involve them in some of the details of their particular field, both girls and boys will begin to see that gender is irrelevant in the face of demonstrated excellence.

Part of educating young people about gender bias is showing how both men and women are socialized to accept particular limits. While women certainly have more restrictions imposed on them than men do, they are not alone in feeling they can enter only certain professions. For example, boys in the United States receive little encouragement to become dancers, which is not true in other parts of the world, such as Europe, Latin America, Russia, and Japan. Boys also are not encouraged to enter the so-called caring professions. Living examples of people who have broken out of these limits to follow their own talents and interests are powerful catalysts for action and self-understanding.

Developing Resources and Support

In examining one's own school, a teacher should ask whether gender issues are visible. Is there a policy statement making gender equity a priority? Has the school ever had any professional development sessions on gender equity in the classroom? Is there any support for mentoring girls, for the inclusion of gender issues in the curriculum, or for teaching strategies that are more sensitive to girls' needs?

Even if the answers to the above questions are "no," teachers still can make a difference in the lives of girls in their classrooms. Girls' talents have room to emerge and grow in classrooms where teachers openly discuss and explore gender issues and where projects and activities consistently include the girls. Gifted girls will feel less "on the spot" and less inclined to hide their abilities in a context where all girls are becoming more aware of gender bias and where opportunities exist to experiment with leadership.

A useful resource is *Girls in the Middle: Working to Succeed in Schools* by Research for Action. This is a comprehensive study of urban, suburban, and rural schools

and includes specific recommendations for reform in the area of gender awareness and intervention (pp. 85-93). It also offers an equity inventory that teachers can use to gauge the extent to which their school is sensitive and responsive to the unique challenges of girls (p. 93). The inventory focuses on the kinds of support the school provides for its female students.

Teachers who are sensitive and sympathetic to the needs of gifted girls may despair of finding the time or energy to respond to them. However, teachers can take advantage of resources *already available* in their school, among the parents, and in the community.

Creating a Teacher Coalition

A coalition of teachers, however small, can accomplish a great deal by pooling resources, networking, sharing ideas, and even pressuring the school to provide additional services or funds for girls, especially high-ability girls who are at risk.

In forming a coalition, teachers will need to muster research data that demonstrate need. A number of organizations can provide the statistics and research that teachers need to build the case for change. For example, the American Association of University Women has published several pivotal studies on the experiences of girls in American schools. These studies include extensive field research, interviews, other useful data, and recommendations for teachers and administrators.

Another useful source is Wellesley College's Center for Research on Women, which publishes information

on the plight of girls in schools today and what some schools have done to turn the tide against the loss of female talent in the education system. (Addresses and phone numbers for both the AAUW and the Wellesley College center are listed at the end of this fastback.)

Involving Parents and Students

Teachers can begin to involve parents by inviting them to see the projects and displays that their children have created. Other avenues for communicating with parents include:

- Creating a classroom newspaper on gender issues, where both girls and boys can contribute articles, stories, and art;
- Using parent-teacher conferences as an opportunity to talk about the lessons that include gender-sensitive information and to share research about gender issues; and
- Writing a letter asking parents if they are interested in joining a coalition of teachers, parents, and students to expand awareness of the challenges faced by girls in the classroom and to increase support for gifted girls' development.

Girls with leadership abilities may be ready to form a coalition of their own — a representative group that can gather information and do projects to promote gender awareness. They might talk to other girls in the school and create a list of common interests and objectives.

The students might use creative displays about women scientists, artists, musicians, writers, and so on

as a way to advertise their interests and goals to other girls. If the girls are theatrically inclined, they might stage a humorous or dramatic presentation — written, directed, and performed by them — demonstrating the ways in which women and girls cope with prejudice and bias in different settings. Or they might start their own newsletter for other students, parents, teachers, and administrators as a way of keeping everyone in the school informed of their activities, interests, needs, and requests.

Involving the Community

Locating supportive individuals in the community need not fall solely on teachers' shoulders. The whole point of forming a coalition is to delegate and to pool resources and contacts so that no one feels burdened. In addition, the in-school coalition is helpful when trying to gain the support of community organizations. Those organizations are more likely to support efforts in which a group of people already have begun taking action than they are to support programs that have no track record.

There are a wide variety of possibilities for involving the community, including:

- Education professors at nearby institutions who might be interested in doing research on gender in the school;
- Businesses or industries interested in training gifted girls or in providing mentors;
- Arts companies willing to provide residencies for talented girls;

- Libraries willing to create displays on gender issues and to provide extra reading materials for the school; and
- Stores interested in donating materials for specific projects.

When teachers network with other teachers and with parents, students, and community members, they will generate many more possibilities.

Planning a Schoolwide Program

After the momentum has been created by a small coalition of teachers, students, parents, and community members, a broader effort may be easier to initiate and maintain. However, what works well in one school may not work at all in another. Each school has its own culture and its own particular collection of talents, interests, and priorities; these should determine the kinds of services and programs to be developed. Following are some possible components of a schoolwide program to support the best education possible for gifted girls.

Girls' groups. Girls' groups include any activities, clubs, or classes where all of the members are female. Supervised by teachers, counselors, instructional aides, or community volunteers, these groups can form from clusters of students already interested in particular subjects, or they can emerge from questionnaires and informal discussions with students. Girls' groups may range from athletic teams to science or math clubs, art classes, an all-girls dramatic club, or a debating team.

Gifted girls will benefit greatly from working with other girls, because the concern about how other students (especially boys) judge their talents will no longer be present. This is particularly valuable for middle and junior high school gifted girls, who tend to narrow their options in response to social pressures (Research for Action 1996, p. 82).

Library resources. The library should make gifted girls aware of the resources on gender-related issues. For example, the library might display books and materials on women. Through contacts with parents and community members, the library may acquire new materials, such as posters, videotapes, audio cassettes, and photographs. Gifted girls, many of whom spend time in the library, will gravitate toward a display area where they can find books by and about women and where they can learn how women have contributed to science, music, and other fields. Girls and boys alike can use library resources to inquire into gender-equity issues, to conduct independent research, to create a project, and to add to the library's showcase.

Inservice training on gender issues. Educators in all areas and grades lack information on the special needs of girls, especially gifted girls, and receive little or no guidance on how to nurture their talents (Silverman 1991, p. 122). However, before inviting an expert into the school to conduct inservice training, teachers who are informed on gender issues would do well to itemize the goals that would be most helpful. For example, an inservice training day might begin with sharing the most

current research on girls in the regular classroom, particularly the plight of talented girls. Later, the training might shift to a hands-on workshop, during which teachers might develop teaching strategies and materials for use in their individual classrooms.

Mentorships. "Nothing is more important to girls' developing sense of self than a mentor" (Research for Action 1996, p. 86). This is particularly true in math and science, where girls frequently exclude themselves because of gender bias and a prevailing sense that classes in these subjects will lead them nowhere. "Teachers in the sciences often perceive the vital link between course work and the professions, but students, particularly female ones, often do not" (Eby and Smutny 1990, p. 136). Professionals in a variety of fields can either work with girls in the classroom or involve them in on-site mentoring.

In a program called "Beyond Theory: Math and Science Related to Industry and Community," supervised by the Center for the Gifted at National-Louis University, 120 gifted students entering seventh, eighth, and ninth grade attended classes, which were combined with mentoring experiences, in local businesses and industries. Girls accounted for about half of the students, and they worked closely with both women and men in male-dominated fields. The experience taught them that the "cutting edge" in the math and science fields demands bold, creative thinking, not just an expert performance of routine formulas and procedures (Eby and Smutny 1990, p. 136). They saw that industries and busi-

nesses actually valued creative thinkers who could manipulate math and science concepts to pioneer new ideas in the field.

Girl researchers. Keeping local university women's centers and education departments informed about a school's efforts (or those of a few of its teachers) can lead to a mutually beneficial partnership. University researchers need sites where they can study gender issues. Schools can benefit from the expertise of researchers, especially if the research involves the school's students. In addition, gifted girls might act as research assistants, informing the university investigators about the culture of the school — its characteristics, attitudes, problems, strengths — and bridging the gap between the researchers and other girls.

Career counseling. It is never too early to expose gifted girls to career possibilities. If one approaches a group of five- or six-year-old gifted girls and asks them what they would like to be, they will answer that they want to be a teacher, an airplane pilot, a mother, an artist, a musician, a scientist, an actress, a lawyer. As gifted girls enter junior and senior high school, the range of choices narrows significantly. Rather than an energetic, confident group of girls talking animatedly about what they would like to do, one will more likely see downcast eyes, self-belittling shrugs, and hesitant responses as they explain what they think they *can* do or *should* do. This is where career counseling becomes critical.

Workshops and counseling programs for gifted girls and young women range from comprehensive pull-out

programs, such as Project Choice, a 14-week career-development experience for talented adolescent women, to courses and workshops aimed at transforming girls' perceptions about math and science (Kerr 1994; McCormick and Wolf 1993). These activities may not apply to gifted girls everywhere, but there are some useful insights that all teachers and counselors can gain from these programs. Programs have the greatest chance of succeeding when:

- Girls are working with other girls or one-on-one with a counselor;
- Girls explore their interests freely and not according to an adult's idea of what a "liberated woman" should aspire to;
- Young women in college or careers talk with gifted girls, either informally or on a panel where there is free exchange of information;
- Girls can investigate female accomplishment and gender bias without being lectured to;
- Gifted girls realize that their negative feelings about themselves and their lack of initiative are common among talented female students;
- Experiences in the program include creative thinking (especially in math and science), learning groups, and projects that challenge gifted girls to think more flexibly, imaginatively, and individually;
- Gifted girls feel empowered to discover and honor their own values, their loves, their interests, their ideas; and

- Girls leave the activity with more awareness of what they want to do in life and with more courage to pursue their goals.

An important component to career development must always be to encourage the aspirations and interests of gifted girls, whatever they may be. Pressuring them to pursue a career simply because women are underrepresented is a flawed approach, and girls will resist this. As Kerr explains:

> Besides using feminist arguments, counselors also often make the mistake of suggesting arbitrary, high-paying, high-status careers as alternatives to girls' more traditional choices. If a gifted girl wants to be a teacher, a counselor is wrong to suggest engineering simply because of the better salary, but if a gifted girl chooses nursing, the counselor might suggest becoming a physician. (1994, p. 213)

Rhetoric about gender bias in society and arbitrary suggestions about what girls should aspire to is ineffective and incorrect. Gifted girls need to find out what career roles and activities give them joy and fulfillment, not those they *should* attempt.

Prodding gifted junior high and middle school girls to consider career decisions before they are ready also has proven to be ineffective. In an interview with Kay North, who conducted a one-day workshop for girls, Kerr quotes North as observing that: "fifth and sixth grade girls have a hard time making long-term goals, like planning for a career. Instead, it is helpful for them to set short-term goals like taking a math summer

course or staying in gifted education" (p. 217). While gifted junior high and middle school girls need exposure to more choices in the career world, they should feel no pressure to plan anything. What they do need is enough exposure to future possibilities that they can consider taking a science course on a university campus for gifted students or joining a writers' club or signing up for a computer programming workshop.

Is it necessary to pressure gifted girls to pursue nontraditional careers in fields that may not attract them simply because women have not occupied these positions? Of course not. The need is to help girls discover what they love doing and to help them pursue it with determination and courage. E. Paul Torrance provides perhaps the best guidance for the gifted girl unsure of where to turn (1983, p. 78):

> 1. Don't be afraid to fall in love with something and pursue it with intensity and depth.
>
> 2. Know, understand, take pride in, practice, develop, use, exploit, and enjoy your greatest strengths.
>
> 3. Learn to free yourself from the expectations of others and to walk away from the games that others try to impose upon you. Free yourself to "play your own game" in such a way as to make good use of your gifts. Search out and cultivate great teachers or mentors who will help you accomplish these things.
>
> 4. Don't waste a lot of expensive energy trying to do things for which you have little ability or love. Do what you can do well and what you love, giving freely of the infinity of your greatest strengths and most intense loves.

Conclusion

In this fastback I have tried to offer a number of ideas and suggestions to teachers on what they can do for gifted girls, based both on research and on my first-hand experiences from a long career in gifted education. What teachers can do for gifted girls depends a great deal on the culture of their school and the framework of support that exists there. For teachers who feel overwhelmed or think too much is required to really make a difference, I would say that doing even a little is a lot for an ignored and bewildered gifted girl. Do not be tempted to think that the changes must be radical and long-lasting in order to help these girls. A moment of compassion, a helpful insight shared at the right time *can* make a difference.

Many a successful woman today would say that one teacher in her life, who did only one or two encouraging things, made all the difference. That encouragement planted a seed that had not been there before and gave her a spark of interest or hope to carry her through. If all a teacher can do is sow a few seeds, then he or she should be content with sowing those seeds. The gifted girls themselves are the real gauge of a teacher's success. Teachers must look to them for confirmation that what they do has helped.

Resources

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Organizations

American Association of University Women
Educational Foundation
1111 Sixteenth Street, N.W.
Washington, DC 20036-4873
1-800-225-9998, Ext. 363

This is one of the finest suppliers of information and ideas on girls in schools. The most useful titles include:

How Schools Shortchange Girls
Growing Smart: What's Working for Girls in School
Girls in the Middle: Working to Succeed in School
Girls Can! Community Coalitions Resource Manual
Schoolgirls: Young Women, Self-Esteem, and the Confidence Gap

Cascade Pass, Inc.
10734 Jefferson Blvd., Suite 235
Culver City, CA 90230-4969

This publisher offers an excellent series on science and math careers from a woman's point of view. They are:

You Can Be a Woman Architect
You Can Be a Woman Engineer
You Can Be a Woman Egyptologist
You Can Be a Woman Marine Biologist
You Can Be a Woman Oceanographer
You Can Be a Woman Paleontologist
You Can Be a Woman Zoologist

Center for Research on Women
Wellesley College
106 Central Street
Wellesley, MA 02181-8259

The Center for Research on Women supplies a number of publications. They include:

Girls in Schools: A Bibliography of Research on Girls in U.S. Public Schools (Kindergarten Through Grade 12), by Susan McGee Bailey.

Pathways for Women in the Sciences: The Wellesley Report, Part I, by Paula Rayman and Belle Brett.

How Schools Can Stop Shortchanging Girls (and Boys): Gender-Equity Strategies, by Kathryn A. Wheeler.

Raising Competent Girls: An Exploratory Study of Diversity in Girls' Views of Liking One's Self, by Sumru Erkut and Fern Marx.

Books for Boys and Girls Today: An Annotated Bibliography of Non-Sexist Books for Infants, Toddlers and Preschoolers, by Carrie Spillane and Maureen Crowley.

Free Spirit Publishing, Inc.
400 First Avenue North, Suite 616
Minneapolis, MN 55401-1730
(612) 338-2068
help4kid@freespirit.com

This publisher carries several books on girls, as well as a range of exceptional materials (books, videos, etc.) on creative and critical thinking. Some of these include:

Girls and Young Women Inventing: 20 True Stories About Inventors Plus How You Can Be One Yourself, by Frances A. Karnes and Suzanne M. Bean.

Girls and Young Women Leading the Way: 20 True Stories About Leadership, by Frances A. Karnes and Suzanne M. Bean.

Growing Good Kids: 28 Activities to Enhance Self-Awareness, Compassion, and Leadership, by Deb Delisle and Jim Delisle.

Building Self-Esteem Through the Museum of 25 Original Projects that Explore and Celebrate the Self, by Linda R. Zack.

Totally Private and Personal: Journaling Ideas for Girls and Young Women, by Jessica Wilber.

National Women's History Project
7738 Bell Road
Windsor, CA 95492-8518
(707) 838-6000

An extraordinary source for teachers at all levels, the National Women's History Project provides posters, books, biographies, and other materials on women in history around the world. It offers the largest collection of sources in the country for girls and young women.

New Moon
PO Box 3587
Duluth, MN 55803-3587
1-800-381-4743

New Moon publishes two magazines six times a year, one for adults, the other by and for girls. Both are excellent sources for teachers. The latter offers opportunities for girls to contribute articles, art, poetry, etc. The two publications are:

New Moon: The Magazine for Girls and Their Dreams
New Moon Network: For Adults Who Care About Girls

Phi Delta Kappa Fastbacks

Two annual series, published each spring and fall, offer fastbacks on a wide range of educational topics. Each fastback is intended to be a focused, authoritative treatment of a topic of current interest to educators and other readers. Several hundred fastbacks have been published since the program began in 1972, many of which are still in print. Among the topics are:

Administration
Adult Education
The Arts
At-Risk Students
Careers
Censorship
Community Involvement
Computers
Curriculum
Decision Making
Dropout Prevention
Foreign Study
Gifted and Talented
Legal Issues
Mainstreaming
Multiculturalism
Nutrition
Parent Involvement
School Choice
School Safety
Special Education
Staff Development
Teacher Training
Teaching Methods
Urban Education
Values
Vocational Education
Writing

For a current listing of available fastbacks and other publications of the Educational Foundation, please contact Phi Delta Kappa, 408 N. Union, P.O. Box 789, Bloomington, IN 47402-0789, or (812) 339-1156.

Phi Delta Kappa Educational Foundation

The Phi Delta Kappa Educational Foundation was established on 13 October 1966 with the signing, by Dr. George H. Reavis, of the irrevocable trust agreement creating the Phi Delta Kappa Educational Foundation Trust.

George H. Reavis (1883-1970) entered the education profession after graduating from Warrensburg Missouri State Teachers College in 1906 and the University of Missouri in 1911. He went on to earn an M.A. and a Ph.D. at Columbia University. Dr. Reavis served as assistant superintendent of schools in Maryland and dean of the College of Arts and Sciences and the School of Education at the University of Pittsburgh. In 1929 he was appointed director of instruction for the Ohio State Department of Education. But it was as assistant superintendent for curriculum and instruction in the Cincinnati public schools (1939-48) that he rose to national prominence.

Dr. Reavis' dream for the Educational Foundation was to make it possible for seasoned educators to write and publish the wisdom they had acquired over a lifetime of professional activity. He wanted educators and the general public to "better understand (1) the nature of the educative process and (2) the relation of education to human welfare."

The Phi Delta Kappa fastbacks were begun in 1972. These publications, along with monographs and books on a wide range of topics related to education, are the realization of that dream.